

### ABSTRACT

Electrospun fibers comprising mesoporous molecular sieve materials are described. In an aspect of the invention, fibers are electrospun from a conducting solution to which a high voltage electric current is applied. The apparatus includes in one aspect one or more conducting solution introduction devices for providing a quantity of conducting solution, said conducting solution introduction devices being electrically charged thereby establishing an electric field between said conducting solution introduction devices and a target, and means for controlling the flow characteristics of conducting solution from said one or more conducting solution introduction devices.